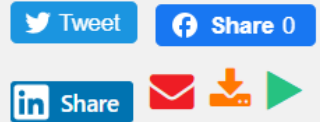# Singapore deploys AI for glaucoma screening

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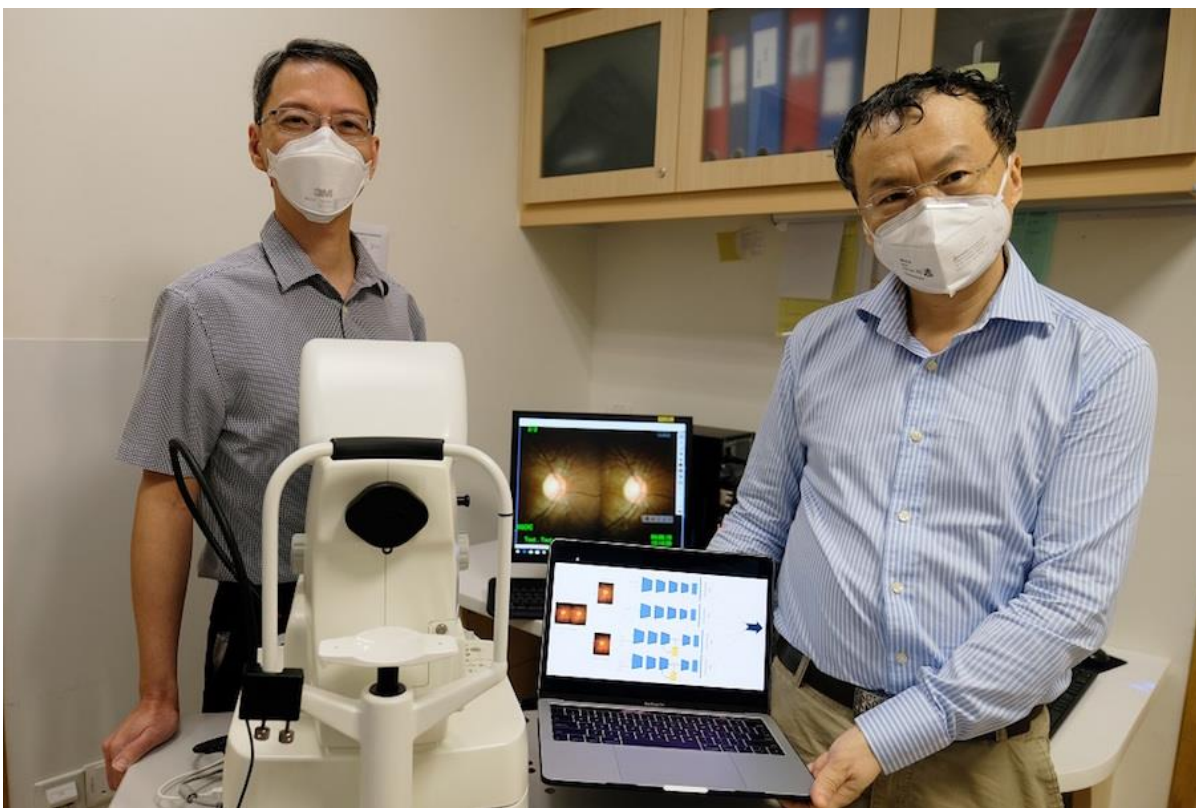**Could potentially be used in less developed areas where patients lack access to ophthalmologists**

image credit- NTU Singapore

Scientists from Nanyang Technological University, Singapore (NTU Singapore), in collaboration with clinicians at Tan Tock Seng Hospital (TTSH) in Singapore have developed a novel method that uses artificial intelligence (AI) to screen for glaucoma, a group of eye diseases that can cause vision loss and blindness through damage to the optic nerve at the back of the eye.

The AI-enabled method uses algorithms to differentiate optic nerves with glaucoma from those that are normal by analysing 'stereo fundus images' – multi-angle 2D images of the retina that are combined to form a 3D image.

When tested on stereo fundus images from TTSH patients undergoing expert examination, the AI method yielded an accuracy of 97 per cent in diagnosing glaucoma.

The team is now testing their algorithms on a larger dataset of patient fundus images taken at TTSH. They are also looking at how the software can be ported to a mobile phone application so that, when used in conjunction with a fundus camera or lens adaptor for mobile phones, it could be a feasible glaucoma screening tool in the field.

https://www.biospectrumasia.com/news/105/18988/singapore-deploys-ai-for-glaucoma-screening.html